

AMENDED IN ASSEMBLY MAY 3, 2005

AMENDED IN ASSEMBLY APRIL 4, 2005

CALIFORNIA LEGISLATURE—2005—06 REGULAR SESSION

## **ASSEMBLY BILL**

**No. 990**

**Introduced by Assembly Member Lieber**

February 18, 2005

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An act to add Chapter 7 (commencing with Section 42880) to Part 4 of Division 26 of the Health and Safety Code, relating to toxic substances.

### LEGISLATIVE COUNSEL'S DIGEST

AB 990, as amended, Lieber. Toxic substances: California Safer Chemical Substitutes Act of 2005.

(1) Existing law requires the California Environmental Protection Agency to initiate a scientific peer review of screening levels for certain contaminants. The agency is required to publish a list of screening numbers determined for specified contaminants, and to conduct public workshops in establishing and revising those levels.

This bill would enact the California Safer Chemical Substitutes Act of 2005. Among other things, the act would prohibit the use or sale of methylene chloride, perchloroethylene, trichloroethylene, or 1-bromopropane, as those terms are defined in the act, including their use in consumer products, on or after January 1, 2007, but would allow their use for specified purposes until designated later dates. The bill would require that a manufacturer or distributor has a duty to take back specified substances from retailers and consumers, and compensate them for the full price paid for the substance or for a consumer product containing those chemicals.

The bill would require the State Air Resources Board to promulgate regulations by August 1, 2006, to implement and enforce the act. The bill would authorize the state board to promulgate regulations that transfer enforcement authority to air pollution control districts and air quality management districts, thereby creating a state-mandated local program by authorizing the imposition of new duties on these districts.

The bill would require that, by July 1, 2008, and every 2 years thereafter, the Office of Environment Health Hazard Assessment, in consultation with the State Department of Health Services, the State Air Resources Board, the Department of Toxic Substances Control, and any other relevant public agency, to recommend to the Legislature whether other chemicals or hazardous substances in commerce in California are candidates for substitution.

(2) The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that, if the Commission on State Mandates determines that the bill contains costs mandated by the state, reimbursement for those costs shall be made pursuant to these statutory provisions.

Vote: majority. Appropriation: no. Fiscal committee: yes.  
State-mandated local program: yes.

*The people of the State of California do enact as follows:*

1 SECTION 1. Chapter 7 (commencing with Section 42880) is  
2 added to Part 4 of Division 26 of the Health and Safety Code, to  
3 read:

4  
5 CHAPTER 7. CALIFORNIA SAFER CHEMICAL SUBSTITUTES ACT  
6 OF 2005  
7

8 42880. This chapter shall be known and may be cited as the  
9 California Safer Chemical Substitutes Act of 2005.

10 42881. The Legislature finds and declares all of the  
11 following:

12 (a) Modern chemicals play a critical role in many aspects of  
13 society, welfare, commerce, and industrial development.  
14 According to the American Chemistry Council, more than 70,000

1 products include some form of chemical substance that  
2 contributes to life-saving medicines, improved foods, more  
3 protective packaging, faster microprocessors, lightweight  
4 automobile parts, and stronger adhesives.

5 (b) However, scientific evidence increasingly links many acute  
6 and chronic diseases with repeated exposure to toxic substances,  
7 even at low doses.

8 (c) Methylene chloride, perchloroethylene, trichloroethylene,  
9 and 1-bromopropane (n-propyl bromide) are all listed as known  
10 to the State of California to cause cancer or reproductive toxicity  
11 under the Safe Drinking Water and Toxic Enforcement Act of  
12 1986 (Proposition 65).

13 (d) Methylene chloride, perchloroethylene, and  
14 trichloroethylene have also been identified as hazardous air  
15 pollutants by the United States Environmental Protection Agency  
16 and as toxic air contaminants by the State Air Resources Board.

17 (e) In 2002, approximately 123,000 pounds of methylene  
18 chloride, 254,000 pounds of perchloroethylene and 4,500 pounds  
19 of trichloroethylene were released in California by industrial  
20 facilities that are required to report to the federal Toxic Release  
21 Inventory.

22 (f) Given the availability of cost-effective and safer  
23 substitutes, the South Coast Air Quality Management District is  
24 phasing out the use of halogenated solvents, including those  
25 containing methylene chloride, perchloroethylene and  
26 trichloroethylene, in degreasing and cold cleaning operations  
27 unless that cleaning is performed in an airless/air-tight cleaning  
28 system.

29 (g) In 2000, the State Air Resources Board adopted a rule to  
30 phase-out the use of methylene chloride, perchloroethylene and  
31 trichloroethylene in automotive consumer products, citing the  
32 significant health risks they pose and the availability and  
33 suitability of nonchlorinated alternative solvents. The state board  
34 found that the rule would not have a significant adverse effect on  
35 businesses, including the ability of California businesses to  
36 compete with businesses in other states.

37 (h) In June 2004, the state board adopted a rule to phase out  
38 methylene chloride, perchloroethylene and trichloroethylene in  
39 consumer products such as adhesive removers, contact adhesives,  
40 electronic cleaners, leather care products, and general purpose

1 degreasers, again citing the significant health risks they pose and  
2 the availability of nonchlorinated alternatives.

3 (i) It is the intent of the Legislature to integrate the concept of  
4 substituting less toxic substances, or preferably nontoxic  
5 substances, for more toxic substances, where these alternatives  
6 are available, into the state's environmental regulatory and  
7 nonregulatory programs alike.

8 (j) There are safer, less toxic alternatives readily available for  
9 many toxic substances in use today. Greater reliance on these  
10 substances will ultimately minimize or eliminate downstream  
11 impacts caused by their release into the environment, exposure in  
12 the workplace or community, or disposal.

13 (k) Where less toxic substances are not readily available, a  
14 substitution mandate can spur innovation of cleaner, less toxic  
15 substances, products, or processes. For example, a European  
16 Union directive to phase out the use of a range of hazardous  
17 substances in electrical and electronic equipment by 2006 has  
18 been a significant driver of product redesign to eliminate or  
19 minimize the use of these substances.

20 (l) California businesses that use or purchase less toxic  
21 substances or products can also maintain a competitive advantage  
22 by reducing costs associated with health care expenditures,  
23 worker illnesses and turnover, materials handling and disposal,  
24 and by opening their products to local, national and international  
25 markets.

26 (m) Studies have found that viable, cost-effective (in some  
27 cases, less costly), and less toxic alternatives to methylene  
28 chloride, perchloroethylene, trichloroethylene, and  
29 1-bromopropane exist in vapor degreasing, cold cleaning, and  
30 other applications in a wide variety of industries. These  
31 alternatives include those solvents that are water- or soy-based or  
32 other alternative technologies such as CO2 snow, plasma etch,  
33 and laser ablation.

34 (n) Investing in California businesses, and assisting them in  
35 developing and using safer alternatives, will make California a  
36 global leader in sustaining an innovative economy based on  
37 research, development, and production of new, cleaner materials,  
38 products and processes that strengthen our economy while  
39 protecting our health and environment.

1 42882. As used in this article, *the following definitions shall*  
2 *apply*:

3 (a) “1-bromopropane” (CAS Registry Number 106-94-5)  
4 means the compound with the chemical formula  
5  $\text{CH}_2\text{BrCH}_2\text{CH}_3$ , also known as n-propyl bromide.

6 (b) “Airless/air-tight cleaning system” is a sealed cleaning  
7 system that has no open air/vapor or air/solvent interface, and is  
8 designed and automatically operated in such a manner as to  
9 minimize the discharge or leakage of solvent vapor emissions to  
10 the atmosphere during all cleaning and vacuum drying  
11 operations. The system consists of devices to condense and  
12 recover solvent and solvent vapor, and control devices to remove  
13 solvent vapors from all gas streams that vent to the atmosphere.

14 (c) “Consumer product” means a chemically formulated  
15 product used by household and institutional consumers,  
16 including, but not limited to, detergents; cleaning compounds;  
17 polishes; floor finishes; cosmetics; personal care products; home,  
18 lawn, and garden products; disinfectants; sanitizers; aerosol  
19 paints; and automotive specialty products; but does not include  
20 other paint products, furniture coatings, or architectural coatings.

21 (d) “Degreaser” is any equipment designed and used for  
22 holding a solvent to carry out solvent cleaning operations,  
23 including, but not limited to, batch-loaded cold cleaners,  
24 open-top vapor degreasers, conveyorized (inline), degreasers, and  
25 air-tight and airless cleaning systems.

26 (e) “Energized electrical cleaner” means a product that meets  
27 both of the following criteria: (1) the product is labeled to clean  
28 or degrease electrical equipment, where cleaning or degreasing is  
29 accomplished when electrical current exists, or when there is a  
30 residual electrical potential from a component, such as a  
31 capacitor; (2) the product label clearly displays the statements:  
32 “Energized Equipment use only. Not to be used for motorized  
33 vehicle maintenance, or their parts.”

34 (f) “Function substitution” means eliminating the use of any  
35 chemical substance to perform a particular function by engaging  
36 in a different means of meeting the same need—for instance,  
37 substituting digital thermometers for mercury thermometers, or  
38 using better day-to-day maintenance to avoid pest problems and  
39 thereby eliminate pesticide use.

(g) “Manufacturer” means any person who imports, manufactures, assembles, produces, packages, repackages, or relabels a consumer product.

(h) “Material substitution” means the direct replacement of one substance for a toxic substance in a simple drop-in process, without otherwise changing the formula or process.

(i) “Methylene chloride” (CAS Registry Number 75-09-2) means the compound with the chemical formula “CH<sub>2</sub>Cl<sub>2</sub>,” also known by the name “dichloromethane.”

(j) “Paint remover or stripper” means any product designed to strip or remove paints or other related coatings, by chemical action, from a substrate without markedly affecting the substrate. “Paint remover or stripper” does not include “multi-purpose solvents,” paint brush cleaners, products designed and labeled exclusively as “graffiti removers,” and hand cleaner products that claim to remove paints and other related coatings from skin.

(k) “Perchloroethylene (Perc)” (CAS Registry Number 127-18-4) means the compound with the chemical formula “C<sub>2</sub>Cl<sub>4</sub>,” also known by the name “tetrachloroethylene.”

(l) “Person” shall have the same meaning as defined in Section 39047.

(m) “Process substitution” means changing one substance to allow for the elimination of the use of a toxic substance by changing the process involved, for instance, using dry ice pellet blasting rather than chemical treatment to remove paint.

(n) “Safer alternatives” means a group of alternatives, or a specific alternative, which has been shown to be most effective at reducing the overall potential for harm to human health or the environment.

(o) “Solvent degreasing” is any portion of the operation from the removal of contaminants with solvents, from parts, products, tools, machinery, and equipment to the subsequent drying of the items.

(p) “Substitution” means “function substitution,” “material substitution,” or “process substitution,” as defined in this section.

(q) “Trichloroethylene” (CAS Registry Number 79-01-6) means the compound with the chemical formula “C<sub>2</sub>HCl<sub>3</sub>,” also known by the name “TCE.”

(r) “Volatile organic compound” (VOC) is any volatile compound of carbon, excluding methane, carbon monoxide,

1 carbon dioxide, carbonic acid, metallic carbides or carbonates,  
2 ammonium carbonate, and exempt compounds.

3 42883. (a) Except as provided in subdivision (b), no person  
4 may use, sell, supply, or offer for sale methylene chloride,  
5 perchloroethylene, trichloroethylene, or 1-bromopropane,  
6 including their use in consumer products, on or after January 1,  
7 2007.

8 (b) Methylene chloride, perchloroethylene or trichloroethylene  
9 may be used, sold, supplied, or offered for sale until the date  
10 specified, if applicable, for the following applications:

11 (1) Until January 1, 2010: solvent cleaning or vapor  
12 degreasing with an airless/air-tight cleaning system.

13 (2) Until January 1, 2010: energized electrical equipment  
14 cleaning.

15 (3) Until January 1, 2010: motion picture film cleaning.

16 (4) Until January 1, 2008: paint removal or stripping.

17 (5) Dry cleaning operations.

18 (c) Substitution for methylene chloride, perchloroethylene,  
19 trichloroethylene, or 1-bromopropane may be achieved through  
20 material substitution, process substitution, or functional  
21 substitution.

22 (d) It is the intent of the Legislature to ensure that chemicals or  
23 other hazardous substances substituted for methylene chloride,  
24 perchloroethylene, trichloroethylene, and 1-bromopropane are  
25 effective at reducing the overall potential for harm to human  
26 health or the environment. At a minimum, substances ~~with for~~  
27 ~~which~~ available scientific data ~~consistent with carcinogenicity,~~  
28 ~~mutagenicity, and adverse effects on reproductive toxicity show~~  
29 ~~that they are carcinogenic, mutagenic, reproductive toxicants,~~  
30 ~~developmental toxicants, or any combination thereof,~~ shall not be  
31 allowed as substitutes for methylene chloride, perchloroethylene,  
32 trichloroethylene, or 1-bromopropane. Consistent with  
33 subdivision (g), the State Air Resources Board, in consultation  
34 with the Office of Environmental Health Hazard Assessment and  
35 the State Department of Health Services, shall promulgate  
36 regulations by August 1, 2006, to carry out the requirements of  
37 this subdivision.

38 (e) Notwithstanding the provisions of subdivisions (a) and (b),  
39 methylene chloride, perchloroethylene, trichloroethylene, or  
40 1-bromopropane and a consumer product containing these same

1 chemicals may be used, supplied, or offered for sale for up to 12  
2 months after the effective dates specified in subdivisions (a) and  
3 (b).

4 (f) A manufacturer or distributor shall have a duty to take back  
5 from retailers and consumers, and compensate them for the full  
6 price paid for methylene chloride, perchloroethylene,  
7 trichloroethylene, or 1-bromopropane or a consumer product  
8 containing these same chemicals sold after the end of the  
9 sell-through period identified in subdivision (e).

10 (g) The State Air Resources Board shall promulgate  
11 regulations by August 1, 2006, to implement and enforce this  
12 section. The state board may promulgate regulations that transfer  
13 enforcement authority to air pollution control districts and air  
14 quality management districts.

15 (h) By July 1, 2008, and every two years thereafter, the Office  
16 of Environmental Health Hazard Assessment (OEHHA), in  
17 consultation with the State Department of Health Services, the  
18 State Air Resources Board, the Department of Toxic Substances  
19 Control, and any other relevant public agency, shall recommend  
20 to the Legislature whether other chemicals or hazardous  
21 substances in commerce in California are candidates for  
22 substitution. The OEHHA shall consider all of the following  
23 factors in developing its recommendation:

24 (1) Whether there is credible evidence that a hazardous  
25 substance poses a potential for significant harm to human health  
26 or the environment in California.

27 (2) Whether the substance is widely used in California.

28 (3) Whether safer alternatives are available for at least some of  
29 the applications or industries in which the substance is used.

30 SEC. 2. If the Commission on State Mandates determines that  
31 this act contains costs mandated by the state, reimbursement to  
32 local agencies and school districts for those costs shall be made  
33 pursuant to Part 7 (commencing with Section 17500) of Division  
34 4 of Title 2 of the Government Code.